

## ADVANCED NOTICE OF PROPOSED RULEMAKING

Comments on: Alternate Energy--Related Uses on the Outer Continental Shelf  
(RIN 1010-AD30) - Renewable Technologies Should Have Environmental  
Liability Issues Waived

by

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### Introduction

The outer shelf has the potential to utilize a broad range of technologies including large and small wind turbines, free flow hydropower turbines, kinetic wave buoys, ocean thermal, on-sea biomass, and on-sea solar electric and solar thermal electric, and potentially below-sea geothermal. In all cases, there are either zero noise, air and water emissions or wastes for water technologies, wind and solar - or very low air and biodegradable emissions for geothermal and biopower. As a result of the zero or near zero emissions, noise and waste profile - rules that govern traditional technologies with documented emissions and wastes - should be waived to expedite approval and encourage project development.

### Basic Case for Ocean Energy as supplied by OREC

In January 2005, the Electric Power Research Institute (EPRI) issued its final report on Wave Energy Conversion in the United States which analyzed the wave potential at various coastal sites in the United States, examined the economics and viability of various ocean technologies and provided an overview of potentially applicable permitting regimes. The EPRI Report concluded that generation of electricity from wave energy may be economically feasible in the near future and as such, warrants continued investigation. In April 2005, EPRI launched a second phase of its oceans program, this time focusing on evaluation of tidal technologies and potential tidal sites in the United States and Canada. Tidal technologies (often referred to as hydrokinetic devices) have potential applicability not just in certain ocean environments but also in rivers and streams -- and have thus attracted attention from the hydroelectric industry.

In April 2005, the Federal Energy Regulatory Commission (FERC), which has jurisdiction to issue licenses for hydrokinetic and ocean technologies, agreed to provide limited waivers from licensing to developers of pilot projects. Verdant Power, developer of the nation's first hydrokinetic project in the East River, New York, had requested the ruling so that it could install six project units and provide power to customers in order to test the project's capabilities in real-world conditions. In the absence of an exemption, Verdant would have had to wait an additional year before it could complete all the studies necessary to receive a license. Moreover, Verdant's inability to test its project without a license posed a

catch-22 because, without the tests, Verdant could not gather data necessary to complete its license application. As a result, FERC made a narrow exception to its otherwise mandatory license requirement. FERC held that developers could obtain a limited exemption from licensing (Verdant was given 18 months) as long as they did not generate power for commercial uses and needed to install the project to gather data needed for the licensing process. With the exemption in hand as well as other necessary permits from the Corps of Engineers and State of New York, Verdant remains on course to deploy its first six units sometime in 2006.

At the same time, while FERC indicated willingness to bend its rules, it has still declined to break them, even to help a new industry emerge. In October 2005, FERC denied Australia-based Energetech's request that FERC declare that Energetech's proposed Port Judith Project, to be located a mile off the coast of Rhode Island, did not require a license. FERC offered Energetech an opportunity to request a more limited exemption. FERC specified that to qualify for the exemption, Energetech would need to show that the exemption was needed to gather data for licensing and that power generated by the project would not have an effect on the interstate grid, which would trigger FERC jurisdiction.

Since the FERC ruling, both FERC and the Department of Energy have tried to explore ways to streamline permitting for hydrokinetic technologies in rivers, streams and oceans. In April 2005, at the behest of the National Hydropower Association, FERC convened a meeting of small hydro and ocean developers, resource agency representatives and other stakeholders to figure out how to expedite permitting without compromising environmental protection. Later that year, in October 2005, DOE, through mediation group RESOLVE, held a three-day meeting in Washington, DC, to familiarize stakeholders with a wide range of existing ocean energy technologies, identify these projects' potential environmental impacts and start a dialogue on how to foster cooperation between developers and stakeholders so that ocean and hydrokinetic projects can move forward.

Other FERC developments included the February and March 2005 issuance of several preliminary permits to two different companies to study tidal energy sites in the Gulf Stream off the coast of Florida. Also, the AquaEnergy Group, located in Washington state, continued to advance through the licensing process for its proposed Makah Bay Project, which will be located in the Olympic Coast Marine Sanctuary in the Makah Bay off the coast of Washington state. In May 2005, AquaEnergy announced that it received a first round infusion of capital from Finavera, an Irish renewable energy company, which can hopefully help AquaEnergy complete the licensing process and bring its projects online.

On the U.S. scene, Ocean Power Technologies (OPT) also made strides, securing \$2.8 million dollars in funding from the Navy for a 1 MW project underway at a naval base in Hawaii. Because of its location on a naval base,

OPT is not subject to FERC licensing requirements though it must still comply with other environmental regulations, including preparation of an Environmental Assessment which has been completed.

#### Developments Overseas

Ocean technologies continued to advance beyond the United States as well. In May 2005, Ocean Power Delivery (OPD) announced a deal with an electric company in Portugal to construct the world's first commercial wave farm. The 2.25 MW project will be comprised of three of OPD's distinctive, orange sausage-shaped, Pelamis units. And in December 2005, Marine Current Technologies announced that it had received additional funding of 2 million pounds for its SeaGen project, which that same month obtained approval needed to move forward with deployment.

#### Legislative and Regulatory Developments

In May 2005, the Ocean Renewable Energy Coalition (OREC), a trade association to promote and advance commercial application of ocean energy, was founded, from where the above data was derived.

The Energy Policy Act requires the Department of Energy to include ocean energy in an inventory of renewables that the new law requires DOE to undertake. And the Energy Policy Act also makes ocean energy eligible for moneys authorized for appropriation for development of renewable energy projects. Prior to the Energy Policy Act, no other federal legislation since the Ocean Thermal Energy Conversion (OTEC) Act of 1970 had accorded recognition or authorized funding for ocean energy. This represents a loss not because ocean developers could have actually used the production tax credit (PTC) (in the short term, they probably cannot), but rather because the availability of a PTC makes projects more appealing to private investors. Thus, ocean developers have a task on their plate for 2006, i.e., to continue to fight for the PTC.

Section 388 of the Energy Policy Act authorizes the Secretary of Interior to grant leases on the Outer Continental Shelf (OCS) for development of alternative energy sources such as offshore wind and wave. Prior to the Energy Policy Act, the Secretary only had authority to lease the OCS for oil, gas and mineral development. Thus, the Energy Policy Act fills a gap in the Secretary's authority and eliminates the uncertainty that has plagued projects like Cape Wind, the 420 MW offshore wind project being developed off the coast of Massachusetts, as to whether they can acquire sufficient property interests to be developed.

On December 30, 2005, the Federal and State Management Service (MMS) issued an Advance Notice of Proposed Rulemaking (ANOPR) seeking comments on the development of a regulatory program to implement permitting of alternative energy uses on the OCS. The ANOPR is a comprehensive effort, comprised of 36 questions on topics such as what types of prequalification criteria, if any, should apply to lease applicants (e.g., a showing of financial

capability to carry out the project), how MMS can balance potential competing uses between different types of alternative offshore uses, what types of environmental information should be required to assess project impacts, whether MMS should consider special programs for permitting pilot projects, and how MMS can calculate royalties, especially for offshore renewable projects which are in their infancy and presumably cannot afford significant royalty payments. One topic, which the MMS ANOPR does not address, concerns the potential overlaps between MMS jurisdiction and those of other agencies. For example, will an ocean energy developer on the OCS need to pass through an MMS licensing process in addition to a FERC process? Or will the agencies enter into some kind of MOU to coordinate efforts and share information? OREC hopes to mobilize offshore renewable energy developers and work cooperatively with more established trade associations to develop comments that will assist MMS in carrying out its responsibilities.

### Base case for Off-Shore Wind

The Cape Wind project—the first offshore wind park in the United States—will be built on Horseshoe Shoal, five miles off the Cape Cod shore in Massachusetts. The wind park will consist of 130 wind turbines, with a total maximum output of 420 megawatts. In average conditions the wind park will produce enough electricity to power three-quarters of the Cape and Islands with clean, renewable energy.

Cape Wind will help reduce America's reliance on imported oil and gas, which we currently import from politically unstable regions of the world. The project will be capable of replacing up to 113 million gallons of oil per year.

From the shore, the slender supporting towers will blend in with the horizon and will be visible one half inch above the horizon on clear days. With the turbines using less than one percent of Horseshoe Shoal and spaced one-third to one-half mile apart, the park will have little impact on the existing uses of the shoal.

Wind is stronger and less turbulent offshore which enables wind turbines to generate more wind energy. In densely populated southeastern New England, an area with a high and growing demand for electricity, available land for wind development is limited and the greatest wind power development potential is offshore. While no offshore wind farm has yet been built in the United States, there have been successful offshore wind projects off the shores of European countries since 1991.

### MMS Regulations

For starters, the off-shore wind, solar, as well as ocean energy industry now has a unique opportunity to directly impact the regulatory regime governing offshore renewable projects through participation in the MMS rulemaking. DOI\MMS must establish a regime, which will NOT deter or foreclose development of ocean energy in the United States..

### Streamlining Permitting and Reducing Costs

Existing regulatory hurdles further complicate matters. Despite FERC's efforts, developers still face several years and millions of dollars in costs to license their small and generally benign projects. Most existing regulation was developed for large utility owned hydro plants, with little thought to cost because utilities can simply pass licensing costs on to ratepayers. Moreover, small tidal or ocean projects simply do not have the same impacts as large hydro plants, with impoundments and reservoirs, which can change the environmental composition of a river basin. And even if ocean energy projects turn out to have unanticipated effects, they are small and portable and can be easily removed.

### Conclusion

Both commercial and emerging renewable technologies hold great promise for clean, reliable energy for the United States. The Department of Interior should open itself to regulations that do not mimic rules established for polluting, traditional energy technologies and resources. There are some rules that apply to any marine-based technologies such as safeguards for marine and aquatic animals and plants. Otherwise, these technologies and projects should have streamlined approvals with active encouragement by the federal government.